

CLAIMS

1. A water filter assembly characterised in that it comprises a water filter arrangement and a water cooling arrangement in an integral unit.
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2. A water filter assembly according to claim 1, wherein the cooling arrangement comprises a thermoelectric heat pump.
3. A water filter assembly according to claim 2, wherein the thermoelectric
10 heat pump is an electronic device comprising a plurality of junctions between dissimilar electrical conductors.
4. A water filter assembly according to claim 3, wherein the electronic device
15 works by the Peltier effect, in that when current is applied across the junctions it provides a warm and a cold side to the electronic device.
5. A water filter assembly according to any of the preceding claims, wherein the filter arrangement comprises a removable filter element.
- 20 6. A water filter assembly according to claim 5, wherein the removable filter element is made of ceramic material.
7. A water filter assembly according to any of the preceding claims, wherein the assembly is arranged so as to be connectable to a mains water supply.
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8. A water filter assembly according to any of the preceding claims, wherein the assembly comprises a chamber with an outlet and an inlet, and means defining a flow path therebetween through the chamber, such that water passing along the flow path is cooled by the cooling arrangement.
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9. A water filter assembly according to claim 8 when dependent upon claim 4, further comprising a thermally conductive member that extends from the cold side of the heat pump into engagement with the flow path.

10. A water filter assembly according to any one of claims 4 to 9, further comprising a heatsink that extends from the warm side of the heat pump.
11. A water filter assembly according to any of claims 4 to 10, further comprising a fan, provided on the warm side of the heat pump to dissipate heat therefrom.
12. A water filter assembly according to claim 11 when dependent upon claim 10, wherein the fan is mounted on the heatsink.
13. A water filter assembly according to any of claims 8 to 12, wherein the chamber comprises a removable lid to permit removal of the filter element therefrom.
14. A water filter assembly according to claim 13 when dependent upon claim 8, wherein the outlet and inlet pass through the lid.
15. A water filter assembly according to claim 14, wherein the chamber is arranged such that water entering thereinto urges cooled water into the filter arrangement.
16. A water filter assembly according to any of the preceding claims, wherein the cooling and filter arrangements are concentrically configured with the cooling arrangement surrounding the filter arrangement.
17. A water filter assembly according to any of claims 8 to 16, wherein the chamber is arranged such that water from the cooling arrangement enters the filter arrangement at one end thereof, and then passes through the length of the filter arrangement.
18. A water filter assembly according to any of claims 8 to 17, further comprising a thermostat that is provided in contact with water in the flow path.
19. A water filter assembly substantially as hereinbefore described with reference to and / or as shown in the accompanying drawing.

20. Any novel subject matter or combination including novel subject matter disclosed, whether or not within the scope of or relating to the same invention as the preceding claims.